

The opinion in support of the decision being entered today was **not** written for publication and is **not** binding precedent of the Board.

Paper No. 18

UNITED STATES PATENT AND TRADEMARK OFFICE

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BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES

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**Ex parte** JOHN S. CORNELL

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Appeal No. 1998-3391  
Application 08/659,143

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ON BRIEF

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Before FLEMING, RUGGIERO and BLANKENSHIP, **Administrative Patent Judges**.

FLEMING, **Administrative Patent Judge**.

**DECISION ON APPEAL**

This is a decision on appeal from the final rejection of claims 1, 6 through 11, 13 through 16, and 20 through 26. Claims 2 through 5, 12, and 17 through 19 are withdrawn from consideration.

The invention relates to an apparatus for two-sided printing. In particular, the invention relates to an assembly

responsive to computer signals for printing a document on two sides.

Independent claim 1 is reproduced as follows:

1. A printing assembly comprising:

a desktop-type first laser printer;

a desktop-type second laser printer, at least a portion of said second laser printer being disposed vertically below a portion of said first laser printer;

a computer for generating a digital signal encoding a multiple page document;

connection means connecting said computer to said first laser printer and said second laser printer for transmitting odd pages of said document to said first laser printer and even pages of said document to said second laser printer; and

guide means for guiding separate sheets of paper in a single U- or C-shaped arc from a paper output port of one of said first laser printer and said second laser printer to a paper feed port of the other of said first laser printer and said second laser printer so that the separate sheets of paper are simply inverted during passage from said output port to said feed port.

The Examiner relies on the following references:

Hasegawa 1990	4,972,236	Nov. 20,
Matsuo et al. (Matsuo) 1992	5,144,386	Sep. 1,
Boeck et al. (Boeck) 1995	5,467,179	Nov. 14,

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Sugisaki et al. (Sugisaki) 5,548,390  
1996

Aug. 20,  
(filed Dec. 9, 1994)

Rather than reiterate the arguments of Appellant and the Examiner, reference is made to the briefs<sup>1</sup> and the answer for the respective details thereof.

#### OPINION

We will not sustain the rejection of claims 1, 6 through 11, 13 through 16, and 20 through 26 under 35 U.S.C. § 103.

The Examiner has failed to set forth a ***prima facie*** case. It is the burden of the Examiner to establish why one having ordinary skill in the art would have been led to the claimed invention by the express teachings or suggestions found in the prior art, or by the implications contained in such teachings or suggestions. ***In re Sernaker***, 702 F.2d 989, 995, 217 USPQ 1, 6 (Fed. Cir. 1983). "Additionally, when determining obviousness, the claimed invention should be considered as a whole; there is no legally recognizable 'heart' of the invention." ***Para-Ordance Mfg Inc. v. SGS Importers Int'l Inc.***, 73 F.3d 1085, 1087, 37 USPQ2d 1237, 1239 (Fed. Cir. 1995),

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<sup>1</sup> Appellant filed an appeal brief on February 12, 1998. Appellant filed a reply brief on May 26, 1998. The Examiner mailed an office communication on June 9, 1998 stating that the reply brief has been entered and considered, but no further response by the Examiner is deemed necessary.

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**cert. denied**, 519 U.S. 822 (1996)(**citing W.L. Gore & Assocs., Inc. v. Garlock Inc.**, 721 F.2d 1540, 1548, 220 USPQ 303, 309 (Fed. Cir. 1983), **cert. denied**, 469 U.S. 851 (1984)).

Claims 1, 6 through 10, 14, 24, 25, and 26 stand rejected under 35 U.S.C. § 103 as being unpatentable over Sugisaki in view of Hasegawa and Matsuo.

On pages 6 and 7 of the brief, Appellant argues that none of these three references relied on by the Examiner discloses or suggests a printing assembly with a paper guide for guiding separate sheets of paper in a single U- or C-shaped arc from a paper output port of one laser printer to a paper feed port of the other laser printer so that the single sheets of paper are simply inverted or turned 180° during passage from the output port to the feed port. Appellant argues that Hasegawa teaches at least two U-shaped arcs in the paper path between two printers of the Hasegawa reference. Appellant further argues that Matsuo does not teach a path that is C-shaped or U-shaped but instead teaches a vertically downward path with horizontal components first to the left and then to the right during transit of the paper along the path. Appellant further argues

on page 8 of the brief, that even if the Examiner could show a C or U-shaped paper path, one of ordinary skill in the art in light of the teachings of Sugisaki, Hasegawa and Matsuo would not arrive at the present invention as set forth in the claims. In particular, Appellant argues that one of ordinary skill in the art combining the teachings of Matsuo with the teachings of Sugisaki and Hasegawa would design a dual printer printing assembly with an S-shaped paper path between the two printers.

In response, the Examiner argues on page 4 of the answer that Figure 1 of Hasegawa depicts the movement of papers from a paper path (25a) to a claw (26a) which then guides the papers to receive rollers (29a) which results in a path that is substantially C-shaped. The Examiner further argues that the shape of the paper guide does not affect the utility of the device. The Examiner further argues that Figure 4 of Matsuo clearly depicts a paper path of a C-shaped nature.

The Federal Circuit states that "[t]he mere fact that the prior art may be modified in the manner suggested by the Examiner does not make the modification obvious unless the

prior art suggested the desirability of the modification." **In re Fritch**, 972 F.2d 1260, 1266 n.14, 23 USPQ2d 1780, 1783-84 n.14 (Fed. Cir. 1992), **citing In re Gordon**, 733 F.2d 900, 902, 221 USPQ 1125, 1127 (Fed. Cir. 1984). It is further established that "[s]uch a suggestion may come from the nature of the problem to be solved, leading inventors to look to references relating to possible solutions to that problem." **Pro-Mold & Tool Co. v. Great Lakes Plastics, Inc.**, 75 F.3d 1568, 1573, 37 USPQ2d 1626, 1630 (Fed. Cir. 1996), **citing In re Rinehart**, 531 F.2d 1048, 1054, 189 USPQ 143, 149 (CCPA 1976)(considering the problem to be solved in a determination of obviousness). The Federal Circuit reasons in **Para-Ordnance Mfg.**, 73 F.3d at 1088-89, 37 USPQ2d at 1239-40, that for the determination of obviousness, the court must answer whether one of ordinary skill in the art who sets out to solve the problem and who had before him in his workshop the prior art, would have been reasonably expected to use the solution that is claimed by the Appellants. However, "[o]bviousness may not be established using hindsight or in view of the teachings or suggestions of the invention." **Para-Ordnance Mfg.**, 73 F.3d at

1087, 37 USPQ2d at 1239, **citing W.L. Gore & Assocs.**, 721 F.2d at 1551, 1553, 220 USPQ at 311, 312-13. In addition, our reviewing court requires the Patent & Trademark Office to make specific findings on a suggestion to combine prior art references.

**In re Dembiczak**, 175 F.3d 994, 1000-01, 50 USPQ2d 1614, 1617-19 (Fed. Cir. 1999).

We find that Hasegawa teaches in column 2, lines 39 through 41, that Figure 1 shows two image forming units 1a and 1b, each of which is actually a compact printer, and a connecting unit 21a for providing a paper path between the two image forming units

1a and 1b. From Figure 1's drawing, we find that Hasegawa does not teach a U-shaped paper path for guiding paper in a single

U-shaped arc from a paper output port of one of the first laser printers to a paper feed port of the second laser printer. From the figure, we find that Hasegawa teaches a S-shaped paper path which starts from a paper output port of the first printer shown to the left of roller (15a) to a paper



feed port of the second laser printer which is shown on the right of roller (16b). Thus, we fail to find that the Examiner has shown that Hasegawa teaches or suggests a guide means for guiding separate sheets of paper in a single U- or C-shaped arc from the first laser printer assembly to the second laser printer assembly as claimed.

We find Matsuo teaches in column 5, lines 8 through 27, that Figure 4 shows a paper path which begins with the paper P discharged from the paper discharging port 2 to proceed around the front of the paper supply unit body 6B to freely fall through the paper discharging passage 39 extending in the up and down direction. This is followed by bending the path of the paper toward the side of the deck 4 with the intermediate guide 40. The paper leaves the intermediate guide 40 at the rear thereof under a condition wherein it is positioned in the bent portion of the bent guide member 42 to freely fall onto the paper discharging tray 41 with the rear end of the paper directed upward. The paper P on the paper discharging tray 41 slides down along the inclination of the tray to be stacked on the paper discharging tray 41.

Therefore, we find that Matsuo does not teach a paper path

C between two printers. Furthermore, we find that Matsuo teaches a paper path which is an arc which is then followed by a V which is a paper path between this discharge of a printer onto a paper discharging tray 41. Again, we fail to find that Matsuo teaches or suggests the Appellant's claimed invention.

When reviewing the three references, Sugisaki, Hasegawa and Matsuo, we fail to find any reason as to why one of ordinary skill in the art would modify Sugisaki to provide a guide means for guiding separate sheets of paper in a single U- or C-shaped arc from the output port of a first laser printer to a paper feed port of a second laser printer as claimed by Appellant in claims 1 and 24. Furthermore, we note that the additional reference Boeck fails to provide the missing piece as well. Therefore, we will not sustain the Examiner's rejection of claims 1, 6 through 10, 14, 24, 25 and 26 under 35 U.S.C. § 103.

Claims 11, 13, 15, 16 and 20 through 23 stand rejected under 35 U.S.C. § 103 as being unpatentable over Sugisaki in view of well known art. The Examiner agrees that Sugisaki

fails to teach a first printer and a second printer being disposed one above the other as well as a web of paper being inverted in a U- or C-shape between the output port and the paper feed port of the two printers respectively. The Examiner argues that it is well known in the prior art that it would be more advantageous to place printers above each other to conserve floor or desk space when the paper flows through plural copying machines continuously to achieve double-sided printing.

On page 3 of the reply brief, Appellant argues that the Examiner's proposed modification requires a complex shifting of one of the two printers from the multiple printer configuration in Sugisaki. The shifting includes both a translation and a rotation. Appellant argues that such shifting in Sugisaki's configuration is not obvious and the Examiner has been motivated to make this modification only because of the hindsight provided by Applicant's disclosure. We agree and we will not sustain this rejection as well.

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In view of the foregoing, we have not sustained the Examiner's rejection of claims 1, 6 through 11, 13 through 16, and 20 through 26. Accordingly, the Examiner's decision is reversed.

**REVERSED**

MICHAEL R. FLEMING	)	
Administrative Patent Judge	)	)
	)	
	)	
	)	BOARD OF PATENT
JOSEPH F. RUGGIERO	)	
Administrative Patent Judge	)	APPEALS AND
	)	
	)	INTERFERENCES
	)	
HOWARD B. BLANKENSHIP	)	
Administrative Patent Judge	)	

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